

BE COOL IN THE GOBA HEAT

By Diane C. Manos, MD, FAAFP, CAQSM
Board Certified Sports & Family Medicine
Medical Director, GOBA

GOBA riders, with high temps and humidity, and a heat index maxing out at 117°F on GOBA in 2018, a brief review of heat illnesses and prevention is provided for your review and safety.

Factors Predisposing Riders to Heat-Related Illness

Extrinsic Factors

Environment

Humidity > 60%, Temp > 82°F, Radiant heat=Sun)

Clothing

Excessive exertion (e.g. long-distance cycling)

Inadequate rest, access to fluids

Medications

Anti-depressants, diuretics, BP meds, antihistamines, amphetamines, Supplements/ energy drinks, caffeine, pseudoephedrine, and alcohol

Intrinsic Factors

Prior history heat illness

Dehydration, Illness, fever

Lack of acclimatization, Low fitness

Sleep deprivation

Obesity (BMI >27)

Types of Heat-Related Illness

Each type of illness has their own unique signs and symptoms. Listed below in order of increasing severity

Heat Cramps:

Painful muscle cramping of the limbs and abdomen from excessive sweating with depletion of salt and water.

Heat Syncope:

Weakness, fatigue, and fainting from loss of salt and water.

Heat Exhaustion:

Heat Cramps +

Cool and pale skin, "goose bumps", headache, nausea, chills, diarrhea, weakness, unsteadiness, decreased coordination, dizziness, rapid pulse, and excessive thirst.

Heat Stroke:

Heat Exhaustion +

Hot and dry skin, incoherent speech, disorientation, impaired consciousness or coma, nausea, seizures, and rapid or irregular pulse from the failure of the body's heat-control mechanism. This can lead to multi-system organ failure and a life-threatening emergency.

Heat Illness Prevention

1. Pre-GOBA temp acclimation

-Get out of the AC and gradually increase cycling in the warm weather at least 14 days prior to GOBA.

2. Hydration/Pre-hydration

Drink plenty of fluids the night before

Drink frequently.

Drink before you are thirsty.

You can still get heat illnesses w/o dehydration

-First 30-60 min of exercise - 1 water bottle of water

-Every 60 min of exercise after - electrolyte replacement is needed. This can be done by diluting

Powerade 50/50 with water or alternating one

bottle of water and one bottle of Powerade

(replaces lost salt and potassium which prevents cramping)

-Gatorade can also be used, but has less potassium

-Consider eating some salty foods at the rest stops

-Other salty drinks and foods as tolerated

-General guidelines for adequate hydration: you should be urinating at every GOBA rest stop (about every 2 hours)

3. Wear Lightweight Wicking or Breathable Clothing AVOID COTTON

-Facilitates sweat evaporation which is a cooling mechanism.

4. Get adequate rest for the next day of riding

5. Start early

-Finish ride by noon, set up camp in some shade

6. Shade, shade, shade and rest as often as needed

-Consider a 10-minute break in the AC at a convenience store, gas station, etc. if needed and available on the route.

-Consider a dedicated water bottle for spraying on yourself.

7. Special consideration for children

- Children do not have the same capacity for heat/cooling regulation as adults, so more attention to them is required.

-Children in buggies are closer to the radiant heat source of the pavement

-Check on them frequently

-Allow them free access to water while in the buggy.

-Popsicles